

State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Aquatic Resources
Honolulu, Hawaii 96813

April 24, 2009

Board of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

Request for Final Approval to Adopt Hawaii Administrative Rules, Chapter 13-60.7,
Kahekili Herbivore Fisheries Management Area, Maui

Submitted for your consideration and final approval is the proposed new Hawaii Administrative Rules (HAR), Chapter 13-60.7, Kahekili Herbivore Fisheries Management Area, Maui (EXHIBIT A). The only change recommended to the version used for the public hearing is to remove the word "deliberately" from Section 13-60.7-4(3).

This proposed new chapter seeks to control an overabundance of invasive marine algae on coral reefs within this area by increasing the local abundance of herbivorous fishes and sea urchins through the use of fisheries management techniques. The strategy is to utilize the natural ecosystem services of herbivorous marine species to help control marine algae proliferation and as a result, help restore healthy conditions to the area's overall marine ecosystem.

The public hearing was held on February 4, 2009 in Lahaina, Maui. A total of 49 people attended the hearing and 30 people gave testimony. Overall the sentiment at the public hearing was split, with half of the verbal testimony strongly supporting the proposed herbivore management area and the other half tending towards opposition. Careful analysis of the hearing minutes suggested that twelve people testified in support, seven in opposition, and eleven did not clearly express either support or opposition.

Written testimony was provided by 24 people and/or organizations within the allotted 15-day comment period following the hearing. The written comments were overwhelmingly in support of the proposed rules with only one person expressing opposition. Included with this submittal are the full minutes of the public hearing (EXHIBIT B), and copies of all the written comments received within the comment period (EXHIBIT C).

Maui Mayor Charmaine Tavares provided written testimony in support of the proposed rules and also offered the assistance of the county to help make the project a success. Support was also provided by the Maui Nui Marine Resource Council (a citizen's ad hoc advisory group), and by other organizations including the Nature Conservancy and the Pacific Whale Foundation. Three well respected Hawaii marine ecologists (Dr. Alan Friedlander, Dr. Eric Brown, and Dr. Cynthia Hunter) provided testimony that corroborated the Department's belief that these rules are based on good science and that the evidence of reef decline makes these management efforts critically important. Many fishers have also provided either written and/or oral comments in support,

including several recreational spear-fishers and one native Hawaiian commercial net fisher who lives near the area and has regularly fished within the proposed herbivore management area.

Many of those expressing opposition felt that land based pollution, overpopulation, overdevelopment, and general over-use were bigger problems than the fishing impacts that the proposed rule is attempting to deal with. Furthermore, many people expressed frustration over native Hawaiian issues, including but not limited to concerns over Hawaiian gathering rights. Many of those who raised the native Hawaiian gather rights issue did not present any specific concerns with the proposed chapter, but instead presented general grievances related to any rules that limit what they can legally harvest.

Although problems with land-based pollution are contributing stressors of the reef ecosystem, management of overabundant invasive marine algae is equally important. It is within the Department's management authority to address invasive marine algae through fisheries management, and this is an important step to protecting coral reef habitats.

The concerns expressed by the native Hawaiian community are very important to consider. It should, however, be noted that the proposed rules do not prevent all fishing, and if the rules are approved, native Hawaiians and all other resource users will continue to have access and will be allowed to legally harvest many species of fish and invertebrates (except for those species groups identified to be protected). Furthermore, scientific evidence has clearly demonstrated that the coral reef ecosystem within the proposed area is in dire need of intervention. Failure to take immediate management action may result in the permanent loss of this critical marine habitat. This proposed chapter represents a critical first step in helping restore healthy coral reefs within this area.

RECOMMENDATION:

That the Board grant final approval for the adoption of HAR Chapter 13-60.7, "Kahekili Herbivore Fisheries Management Area, Maui".

Respectfully Submitted,



DAN A. POLHEMUS
Administrator

APPROVED FOR SUBMITTAL:



LAURA H. THIELEN
Chairperson

Attachments

EXHIBIT A

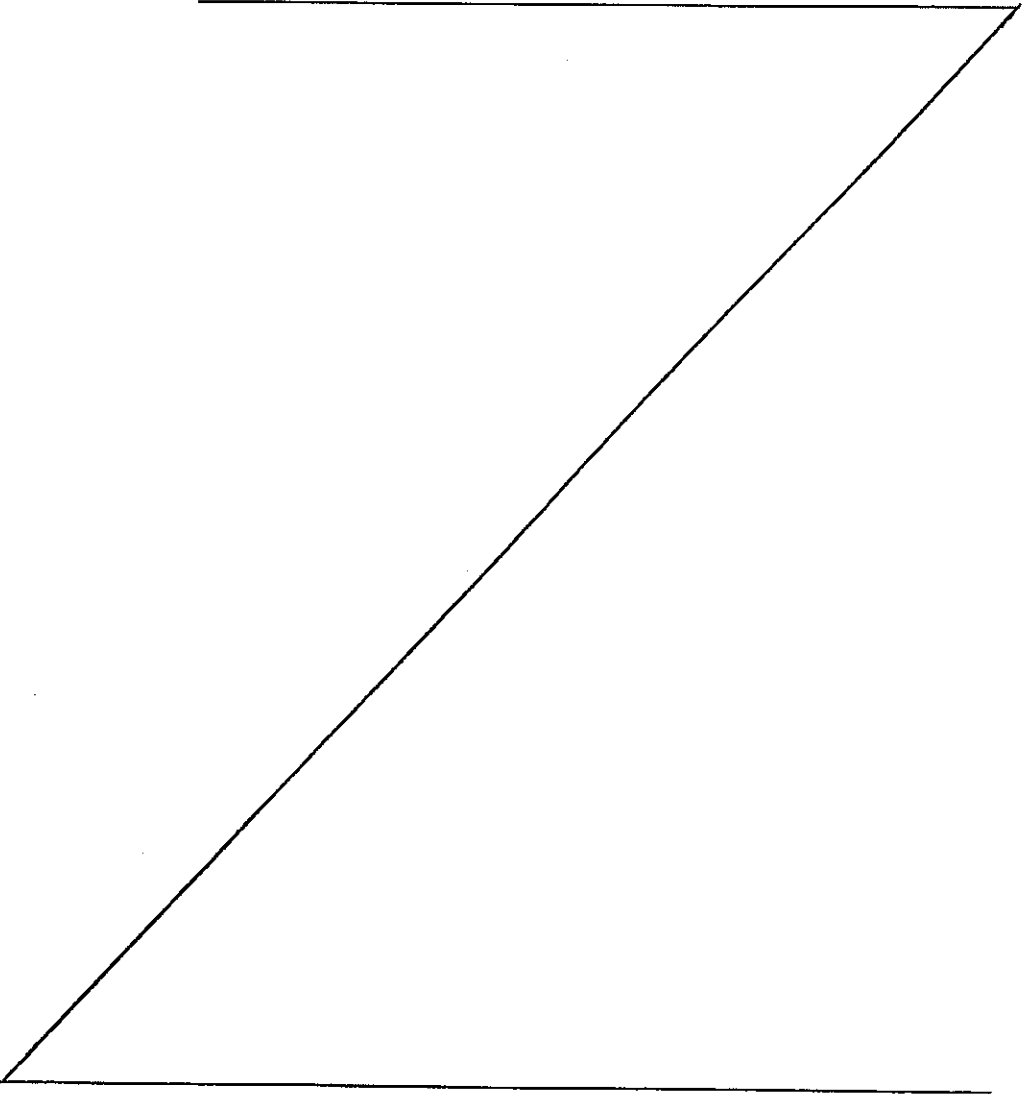
RAMSEYER DRAFT
(07/17/08)

DEPARTMENT OF LAND AND NATURAL RESOURCES

Adoption of Chapter 13-60.7
Hawaii Administrative Rules

(date)

1. Chapter 60.7 of Title 13, Hawaii
Administrative Rules, entitled "Kahekili Herbivore
Fisheries Management Area, Maui" is adopted to read as
follows: _____



"HAWAII ADMINISTRATIVE RULES

TITLE 13

DEPARTMENT OF LAND AND NATURAL RESOURCES

SUBTITLE 4

FISHERIES

PART II MARINE FISHERIES MANAGEMENT AREAS

CHAPTER 60.7

KAHEKILI HERBIVORE FISHERIES MANAGEMENT AREA, MAUI

- §13-60.7-1 Purpose
- §13-60.7-2 Definitions
- §13-60.7-3 Boundaries
- §13-60.7-4 Regulated activities
- §13-60.7-5 Exceptions; permits
- §13-60.7-6 Penalty

§13-60.7-1 Purpose. The Kahekili Herbivore Fisheries Management Area, Maui is designated to control the overabundance of marine algae on and about coral reefs within this area by increasing the local abundance of certain herbivorous fishes and sea urchins by fisheries management methods. Natural controls of marine algae are intended to help the marine ecosystem in the area return to a healthy balance. [Eff _____] (Auth: HRS §§187A-5, 188-53) (Imp: HRS §188-53)

§13-60.7-2 Definitions. As used in this chapter, unless the context clearly indicates otherwise:

"Acanthuridae" means the family of fishes commonly referred to as surgeonfish or tangs (including but not limited to 'api, kala, kole, manini, and palani).

"Board" means the board of land and natural resources.

"Department" means the department of land and natural resources.

"Kahekili Herbivore Fisheries Management Area" ("area") means the marine managed area of north Kā'anapali, Maui from Keka'a Point to Honokowai Park as described in section 13-60.7-3.

"Kā'anapali Beach" means the north Kā'anapali beach area from Keka'a Point to Honokowai Point.

"Keka'a Point" means the prominent lava rock point that separates Hanaka'ō'ō Beach on the south from Kā'anapali Beach on the north. This point is often referred to as Black Rock.

"Kyphosidae" means the family of fishes commonly referred to as sea chubs, rudderfish, or nenuē.

"Herbivore" means any marine organism that feeds primarily on algae (limu).

"Hanaka'ō'ō Beach" means the beach fronting the southern portion of Kā'anapali Beach on the southern side of Keka'a Point (Black Rock).

"Scaridae" means the family of fishes commonly referred to as parrotfish or uhu.

"Sea urchins" are invertebrate marine animals of the class Echinoidea, variously referred to as, but not limited to, wana, hālula, hā'uke'uke, hāwa'e or 'ina. [Eff] (Auth: HRS §187A-5, 188-53) (Imp: HRS §188-53)

§13-60.7-3 Boundaries. (a) The Kahekili Herbivore Fisheries Management Area shall include that portion of submerged lands and overlying waters of the north Kā'anapali area as follows:

- (1) The southern boundary shall begin at the highwater mark of the shoreline on

Hanaka'ō'ō Beach and run directly west (90°) to a point offshore along the southern rocky shoreline of Keka'a Point for a distance of 335 yards.

- (2) The northern boundary shall begin at the highwater mark of the shoreline on the southern end of Honokowai Beach Park and run directly west (90°) to a point offshore for a distance of 1,292 yards.
- (3) A straight line shall then run directly north (0°) and connect offshore points of the southern Hanaka'ō'ō Beach boundary with the northern Honokowai boundary.

(b) Boundaries are further described and include both landward and seaward GPS coordinates in the map entitled "Kahekili Herbivore Fisheries Management Area, Maui, Hawai'i" attached at the end of this chapter and made a part hereof. [Eff]
(Auth: HRS §§187A-5, 188-53) (Imp: HRS §188-53)

§13-60.7-4 Regulated activities. (a) No person shall engage in the following activities within the Kahekili Herbivore Fisheries Management Area:

- (1) Injure, kill, possess, or remove any fish of the families Kyphosidae (sea chubs, nenu), Scaridae (parrotfish, uhu), or Acanthuridae (surgeonfish, tangs).
- (2) Injure, kill, possess, or remove any sea urchins.
- (3) Feed or deliberately introduce any food material, substance, or attractant, directly to or in the vicinity of any aquatic organism, by any means or for any purpose except as allowed in subsection (b).

(b) A person may engage in the following activities within the Kahekili Herbivore Fisheries Management Area:

- (1) Fish for, injure, kill, possess, or remove any fish or invertebrate not prohibited in subsection (1) and subject to the provisions of all other existing statutes and rules.

- (2) Use bait and other fish attractants in the process of fishing for any marine life not prohibited in paragraph (1) or other statutes or rules. [Eff]
(Auth: HRS §§187A-5, 188-53) (Imp: HRS §188-53)

§13-60.7-5 Exceptions; permits. The department may issue permits to engage in activities otherwise prohibited by law and section 13-60.7-4, in accordance with sections 187A-6 and 190-4, Hawai'i Revised Statutes, provided that:

- (1) The board may impose terms and conditions it deems necessary to carry out the purpose of this chapter, including requiring a report or reports of any marine life taken from the area;
- (2) The board may revoke any permit for any infraction of the terms and conditions of the permit;
- (3) A person whose permit was revoked shall not be eligible to apply for another such permit until one year after the date of revocation; and
- (4) The department may limit permits to purposes of public health, safety, and welfare; for resource management, or as described in section 187A-6, Hawai'i Revised Statutes.

[Eff] (Auth: HRS §§187A-5, 187A-6, 188-53) (Imp: HRS §§187A-6, 188-53)

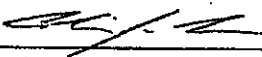
§13-60.7-6 Penalty. Any person violating the provisions of this chapter may be punished as provided by sections 187A-12.5, 188-70, or chapter 199D, Hawai'i Revised Statutes, and as may be otherwise provided by law." [Eff] (Auth: HRS §§187A-5, 188-53) (Imp: HRS §§188-53, 188-70, 199D)

2. The adoption of chapter 13-60.7, Hawai'i Administrative Rules, shall take effect ten days after filing with the Office of the Lieutenant Governor.

I certify that the foregoing are copies of the rules drafted in the Ramseyer format, pursuant to the requirements of section 91-4.1, Hawai'i Revised Statutes, which were adopted on _____, and filed with the Office of the Lieutenant Governor.

LAURA H. THIELEN, Chairperson
Board of Land and Natural
Resources

APPROVED FOR PUBLIC HEARING:



Deputy Attorney General

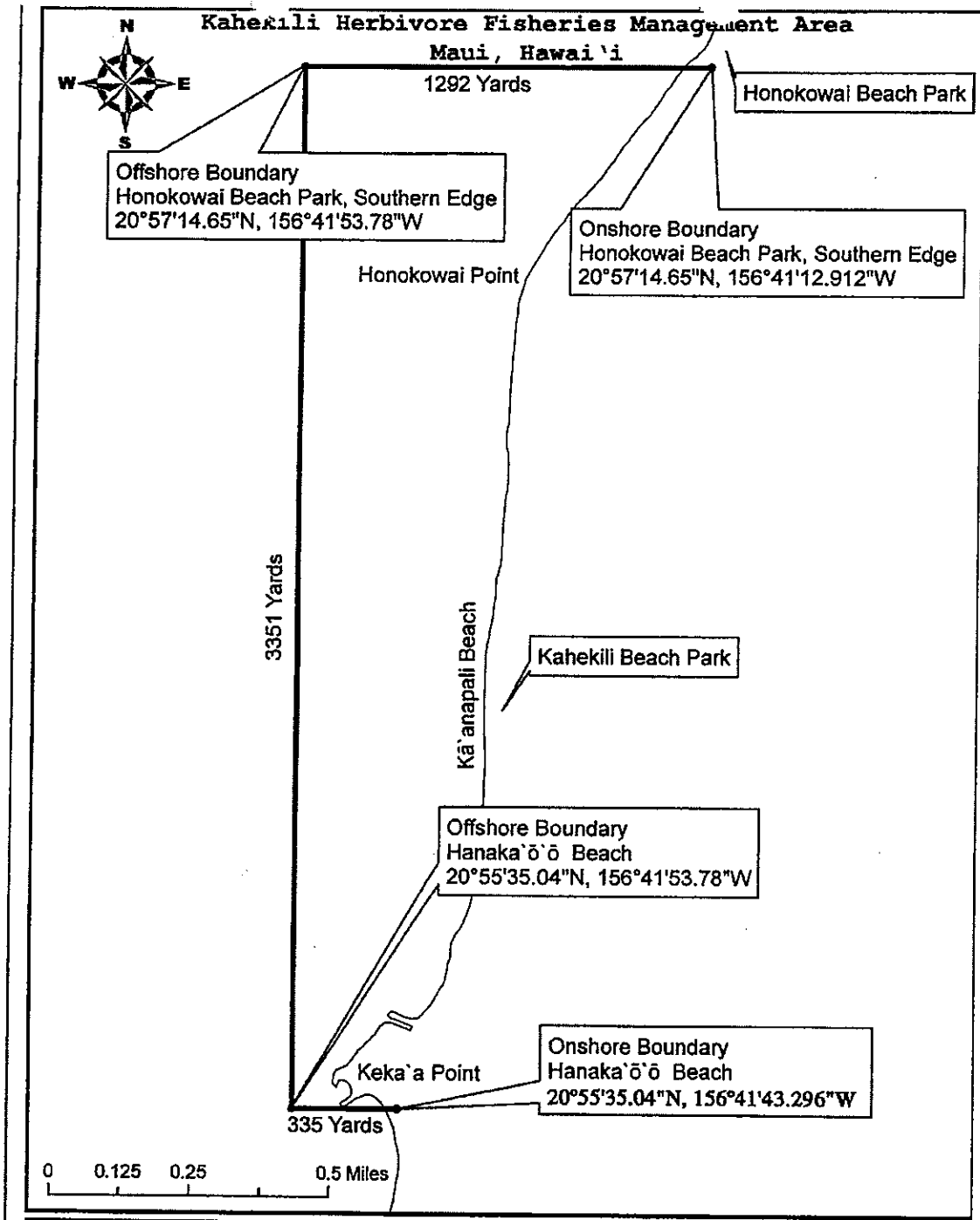


EXHIBIT B

MEETING MINUTES

of Public Hearing regarding Proposed Amendment of Hawaii Administrative Rules Chapter 13-60.7 to establish the Kahekili Herbivore Fisheries Management Area in North Ka'anapali, Maui

I. Introduction

A. Opening

1. This is a Public Hearing conducted by the Department of Land and Natural Resources (DLNR).

It is now **February 4, 2009 6:14 P.M.** and this Public Hearing is called to order.

2. My name is Skippy Hau and I am a staff biologist with the Department of Land and Natural Resources. I will be conducting tonight's public hearing.
3. This is a formal Public Hearing on the proposed amendment of Hawaii Administrative Rules Chapter 13-60.7, Relating to the establishment of the Kahekili Herbivore Fisheries Management Area in North Ka'anapali, Maui.
4. The DLNR is authorized to create this proposed Area under the Hawaii Revised Statutes Chapter 187A-5 titled "Rules" and Chapter 188-53 titled "Fishing reserves, refuges, and public fishing areas".

B. Purpose

1. The purpose of this hearing is to provide the public the opportunity to provide comments in the form of oral and written testimony on these proposed administrative rules of the Department relating to the establishment of the Kahekili Herbivore Fisheries Management Area, in north Ka'anapali, Maui.
2. I hope that all of you have signed in. If you have not, please do so. We have to make a complete record of all persons attending this hearing.
3. There is also a separate sheet to sign for those wishing to present testimony on the proposed rule changes.
4. When it is time to testify, I will call the names in the order that they are listed on the sign-in sheet.

5. No one will be allowed to testify unless first having signed up on the testimony sign-up sheet.

C. Present staff and others

1. At this time, I would like to introduce other staff from our Department: With me tonight from the Maui Division of Aquatic Resources Office, is **Russell Sparks, and Kainoa Gonsalves**
2. (Recognize any legislators or other notable persons present). **NONE**

II. Background

- A. These proposed rules are the result of several small meetings and public discussions with stakeholders and various other interested members of the public. These meetings have occurred at various sites throughout the island, but have been mostly concentrated in the West Maui Area.
- B. Approvals to conduct this public hearing have been obtained by the Department from the Board of Land and Natural Resources on August 22, 2008 and from Governor Linda Lingle on November 28, 2008.
- C. Copies of the proposed administrative rules are available for inspection at the table near the entrance. During this hearing we will record your comments and opinions on this proposal.

III. Notice of public hearing

- A. The Legal Notice of this public hearing was published in the December 28, 2008 Sunday issues of the Honolulu Star Bulletin, and the Maui News.

IV. Hearing procedures

- A. This hearing will be conducted as follows:
 1. I will explain the proposed changes to the administrative rules.
 2. Then I will call on those who have signed up to testify in the order as they are listed on the sign in sheet.
 3. Everyone will have an opportunity to voice their opinion for the department to consider. We will hear from everyone who has signed up on the list. If you intend to testify but have not signed up yet, again I urge you to do it now.
 4. We are using an audio recording device to record this hearing. So when your name is called, please come to the front and speak to the microphone. State your name for the record before giving your

testimony. If you represent an organization, please state the name of your organization.

5. Please keep your testimony brief and on the subject in order to allow all those who came today the opportunity to testify. We will be limiting tonight's testimony to three minutes per person. A yellow card will be displayed when the testifier has one minute of time left, and a red card will be displayed when the time limit has been met.
6. After those who signed up have presented their testimonies, I will ask if anyone else wishes to testify. If you have additional comments to give after the first round, you may also request for another chance to do so at this time. At this point, everyone wishing to testify, must sign their name on the testimony sign-up sheet.
7. Please remember that there may be differing opinions. Everyone should respect the opinions of all testifiers and understand that this hearing is not an opportunity for accusations or rebuttals.
8. If you have a question, please direct it to me, and I will find the most appropriate person to answer. Please do not direct your questions or comments to anyone else.
9. Please remain quiet until you are given the floor to testify. Please do not interrupt the person who is giving testimony.

V. Rule Explanation

The following is a summary of the proposed rule:

- §13-60.7-1: Outlines that the purpose of the proposed Kahekili Herbivore Fisheries Management Area is to control the overabundance of marine algae on and about the coral reefs of this area by increasing the local abundance of certain herbivorous fishes and sea urchins. This action should help promote natural control mechanisms that the department feels will return this marine ecosystem to a healthy balance;
- §13-60.7-3 : Outlines the exact boundaries of the proposed Kahekili Herbivore Fisheries Management Area which will include the nearshore waters from Keka'a Point (Black Rock) to Honokowai Park;

- §13-60.7-4(a): Outlines proposed restrictions within the herbivore FMA. These restrictions would prohibit the injury, killing, possession, and/or removal of any chub (nenu), parrotfish (uhu), surgeonfish (tang), and/or sea urchins (wana). This section also outlines prohibitions against fish feeding;
- §13-60.7-4(b): Outlines activities that would still be allowed within this proposed area. These activities include fishing for, injuring, killing, possessing, or removing any fish or invertebrate not protected in subsection (a) or by other currently existing laws. In short, this section states that all other currently legal forms of fishing will still be allowed;

VI. Testimonies

- A. As I call your name, please come forward to the microphone, and state your name and begin your testimony. ...
- B. Are there any others who wish to testify, or anyone who has already testified who would like more time? If so, please come forward and sign the testimony sign-in sheet and provide your testimony at this time.
- C. Written testimony: Persons unable to attend today or wishing to present additional comments, may mail written testimony to us by **February 19, 2009** (15-day comment period) to the following address:
 Department of Land and Natural Resources
 Division of Aquatic Resources
 1151 Punchbowl Street, Rm 330
 Honolulu, HI 96813

VII. Decision-making on the proposals:

- A. Based on the testimony presented, the Department will submit its findings and recommendations to the Board of Land and Natural Resources.
- B. If approved by the Board, the Department of the Attorney General will conduct a final legal review. If approved, the proposed rules will be given to the Governor for her final approval.
- C. Should the Governor grant approval, certified copies will be filed with the Lt. Governor's office, and after 10 days, it becomes effective as law.
- D. Are there any questions regarding this process? **NONE**

John Seabart – Volunteer with DAR doing herbivore fish counts, have seen in protected areas such as Ahihi Kinau the amount of algae along with bigger and more fish, you don't see the amazing coral structure is virtually clean in those areas that you don't see in Kahekili. Speaking for the human race we are all aware on how bad things have gotten reductions of fish all over the world. My personal thought is that if we can return the ocean to its full abundance back to 300 yrs ago although that's a tall order that would be wonderful thing, then we can take more fish than we ever take now, if we return to the primordial state we would be better off, this study is the step in right direction, for that reason it's the right thing to do anyone who fishes here does any realize that you cant get what u used to get like when u were younger, the bottom line is there's very few convict tangs or manini certainly no schools of this you may see them with some brown tang don't see big some schools of yellow tang brown tang fish. There are no schools yellow tangs or white bar? tangs. It would be a great thing You can have more fish in the area it would be great to restore to Maui full abundance in several years time and go a long way to restore to planet to full abundance I know that this is not concern of DAR. I'm for this project and I hope it succeeds, for people who are against think of the notion; u cant continue to take things even when we want to go fishing and we can't go and deplete things, if this helps to remove algae and have more fish than we will be better off.

Kuheia Parcuellas – on behalf of Maui Mayor Charlene Tavares. (Read and submitted written testimony) – In support of this proposed designation of the Kahekili Herbivore Fisheries Management Area. There are many factors that affect the quality of our near-shore waters and the ability of our unique marine life to thrive. My administration has been a strong proponent in the protection of Maui's reefs and near-shore waters. We will continue to efforts to support measures like these. I request that DAR keep my office and the public informed on the progress of this FMA and it's affects on the coral reef.

Liz Foote – We know that reefs are important and on the delicate world wide and locally, DAR data show that North Kaanapali shows reef systems are 50 % decrease reef decline of coral cover, over the decade healthy herbivores population would keep algae growth in check. This proposed rule would establish a specific defined area where population of herbivore fish & vertebrates are protected and ban fish feeding in the area. This is exciting for science and the resource management since the outcomes can be

monitored in its effective as a management action and later be assessed. In my own work in education outreach my work the impression for outreach is community supported although not present tonight, and will do my best to inform people about this proposed rule change. Support and Voluntary compliance is needed for this management action to work.

(submit written testimony see email 02/19/2009)

Robin Knox – (read & submitted written testimony) –Environmental scientist & water quality specialist experience in waste water treatment, control including runoff and storm water. In support of proposed KHFMA rule to prohibit the take of certain herbivore fish, reefs in this area is in decline.

We know that reefs affects by degradation due to overgrowth have lower coral cover to have lower commercial and recreational value.

Overfishing of herbivores and discharge of nutrients from land-based pollution impacts have been the contributing causes to algal bloom overgrowth. The fact that DAR has engaged in a comprehensive approach to resource management as well as addressing problems that we cannot change such as climate, taking a look at pollution and overfishing as stressors that can be controlled.

Audrey Dack – working on herbivore study as volunteer, the clear water in Ahihi Kinau clean coral and abundance of fish , seen Kahekili with not so many fish ,a lot of algae cover on coral , been attacked by hand fed fish, when fish feeding stopped herbivores fish were eating the algae. I am in support of protecting herbivores in the area so they can keep reef clean in Kahekili Reef. What we do on land affects us as well, the Triten fish needs to be protected the only carnivore species that eats crown starfish which is capable of devouring the coral, reducing its quality. This is an important start.

Rick Long – (read & submitted written testimony) Social worker for Hawaii Dept of Health, I represent my self. I want the people and families of Hawaii to be healthy as possible for generations to come, need to keep land, air and sea healthy. I am a Volunteer surveyor in Honolua Bay to ‘Ahihi Kinau, especially the herbivore area of Kahekili this regulation is not about fishing but about the coral reef itself. Why not pull it out by hand or bring the Super Sucker from Oahu , it invades reef by breaking up and float spread easily by touching or removal , last summer watched the surge of ocean break apart this seaweed and float away and reattached itself in

'Oluwalu. The reef at Kahekili is different to solve the problem the fish eat the algae and keeps it under control. Listen to wisdom of science in this proposed regulation it is like the Ahupua'a system of management, listen to wisdom and science on presentation, to declare kapu to take some fish just as ancient times. If right the coral reef will survive, people of Hawaii want to keep family healthy, if coral reef die fish will disappear without the fish the spirit of people will be harmed.

Ui'lani Kapu— First time reading this proposal questions reading this, How far out from Kahekili? How many permits will you issue? What reason would allow permits? How long will the ban be for? Is this a continuous ban? Kapu system was every 3-4 months. Our family live off these fishes we do have native tenant rights , we will be harassed by DLNR because we will be going out to area doing sustainability fishing for our families, we know reefs are critical and critical cycle of life. Native Hawaiians of this area we know the rules on bans, we know those rules as native people of areas that have fished area for years. We know how to sustain ourselves but the State government don't have enough to enforce it. We will save our own Ahupua'a for ourselves and families within those areas. We have new people that come to this Island not knowing how to read these rules, how will you give the information to visitors, how will you get information to these people?

Kekai Akahi — I am for conservation but done the right way not target one group of people, why not large land owners, ones responsible for 100 years of runoff, Streams flow not coming down. Important but you will go after you guys, but they cause problem? Not fair, Who bought taape , roi, these are the worse species it goes after smaller fish. I was in the first meeting, I told you about the information, 72 tons of fertilizer/year on golf courses, only a few feet above sea level. See the large landowners. We need to fight for water rights, fight for fish rights. When I was a young kid no such thing as "conservation" we live and practicing conservation. Scientist in here with more information, I feel I have over 2000 yrs of knowledge all passed down all of us here. I'm frustrated, I'm for conservation, go talk to the big companies: AMFAC, Maui Land and Pine, resorts and hotels like the Hyatt you talk to them but you apply the law to us Hawaiians, it's not

Yolanda Dizon — Like you said why do Hawaiians keep paying for the mistakes of other people, damage is being done continuously , this ban will not be for 3-4 yrs it will not happen , the results you looking for will take

maybe 40 years just like what you did in Hanauma Bay - the damage is done continuous runoff, no fresh water, no flow from the streams. First you steal our land so people cannot go on, steal our water resources cannot drink water , now you telling us you will steal food off of our plates because of mistakes of every one else cannot, our people cannot feed their family an injustice being done .

Emily Fielding for Susan Case of Nature Conservancy (read & submitted in writing) In support of KHFMA. We commend DAR for attention to depleted herbivores and invasive algae on Hawaii's reef. Excessive algae will lead to degraded reefs, recovery of reefs will be slow. Reefs will erode and flatten unable to support abundant marine life, act now since Kahekili has considerable time to recover. The Science points to vital role that herbivore play in maintaining coral reefs and positive impacts on reefs with evasive algae, protecting herbivores & other proposed management actions in laws within Kahekili will sustain a healthy reef. The spread of alien invasive algae is worsening in Hawaii when appropriate herbivore fisheries management areas can control and protect near shore marine environment can be an effective tool in protecting coral reef decline.

On personal note thank Maui DAR staff for exceptional community outreach and education and proactive approach on our Maui marine resources.

Renee Umberger – thank you to Skippy and Russell for DLNR and DAR. Full support of FMA but why SMA exemption? Why no exemption for native Hawaiian rights? Why had this not been included? Good thing potentially the lessons learned protection of herbivore fish important asking DLNR to put strong regulations on aquarium collector who exports by the thousands herbivorous from Hawaii reef why only \$50 for the yearly rate on CML annual permit. Why does the DLNR supports only 85 guys in the State engaged in aquarium collection, they should not be allowed to continue. Please make rules to regulate aquarium trade & stop promoting and supporting it, DLNR 2007 harvest report collector killed 20,00 fish last year before making to a mainland bound plane, although 20, 000 fish may not be important & just the tip of the iceberg but such fish can be found in other areas like Old Airport beach or Black Rock

By State CRAMP reports show 10,000 fish per 100 acres all who go to these if you dive or snorkel at these sites imagine fish gone and dead due to being captured on reef to be shipped to supply the aquarium hobby, Kahekili is good thing I can go and collect every kind of butterfly fish, wrasse to hermit

crab on the herbivores list since I got my Aquarium collector license and will need to make back my \$50.

Napai ?(‘olelo Hawaii) – I am a Kuleana, 1959 I was 10 yrs old the first hotel the Honokawai park & down to Sheraton Maui first hotel in area. When the runoffs from the pool, we Hawaiians knew the reefs no going last long. I am against this, you take the rights away from the (Kanaka Maoli) Hawaiian people you taking the rights from us it's unfair, You take away gill nets, what more? I'm asking you to take care of our land, years of oppression I have known because of reefs depletion and runoffs from hotels. Take care the land "mai ka uka a kekai" you kill my source of food from the mountain to ocean the all the food resource has been killed, Kihei to Hana nothing left, opae 1 gallon / month. What are you talking about the reefs? 60 yrs the reef is gone by the damage from Kekaha to Honokawai all the way to S turn, I know of all families who dived and fished these areas don't take the right, the right way to look at the law from time to time they build, how much damage, all families used to dive, things are not right, mahalo.

Filamon Sadang – In 2007 we met with Russell talk about rule was trying to come up plan with Ahumoku council, When we met with Russell I said "I will not fish there provided if you can check on the runoff" Will you push the issue of the runoff? Who's going to enforce this? Who's going to pay for this? How much will we spend to protect area? I know we got to save resources, as a fisherman I'm doing it in my area We need to save resources, I do my part in my area and everyone should do it in your area. Enforcement is good when we cover our own area, we know when to fish , and when not to. You do not take productive size females you cannot take the babies, in support of conservation and management how much it will cost?

Paul Fujishiro – come from Ukumehame, Kahekili to Honokawai I would fish from 70 yrs ago, I never fished there after the runoff, when plantations were active that would prevent silt from going down, for those who were not here when plantation was active here you never saw the dirty water go down, they had secondary lewers to get the silt down, I am in support with this as long as you do some kind of comprehensive planning, looking at projections 70 to 100 years from now, You get to spend all the money to find out the due cause of why the reefs are depleted ? Experience tells me that tourist came and they cut down Keawe trees just for these visitors to look at the ocean this is stuff a lot of the fish eat. When it comes to golf

courses you should look into perma-culture look for natural stuff for them to use, Do they use natural stuff it saddens me that the reefs just are left to crumble.

Isiah Nakaiwi – I represent the young generation I see what DAR is doing I'm glad DAR is thinking of the reef, and spend money towards that, it's the wrong way to do it we pay for all of this. Where are the boundaries? I see more hotels and the pool runoffs going in the water, no more ogo, we talk about killing the reef, there's drainage that runs in the canal that leads from the Embassy run off goes in our water, fish will not come around to eat all the junk stuff. What about tako, oama, uluas are these species going to be enforced? What part of the boundaries are we looking at by where the kids jungle gym can play, can we teach our keiki how to fish? Honokawai beach park perfect place, what about o'ama will this kind of fish be banned? can we dive for tako(octopus) will this be illegal can we still take? and will the DLNR not going to bust us.

Micheal Garbin – I want to talk to the people making the decisions Hawaiian been doing this forever, what you were taught in school get your degree, then you come to tell my kupuna what to do, oceans feed me kala, manini. You do the right things up in the mountain, and you do the right things come down to the ocean and everything will be ok. You let the junk water run down, you let the tourist in and try keep them out of the ocean no more fish in Ka'anapali .

Serena Perry – Baldwin High School sophomore, science fair project on this issue, what we did in our project was line transects at 4 beaches in areas in 2 Marine Life Conservation District's 2 areas were and not , I have never snorkeled before but we my partner and I wanted to see what the correlation of the quality of coral vs abundance of fish, did find places with no fishing restrictions the coral was degraded and just seaweed stacked depressing to see fish trying to live in environment, that the damaged that people have done we narrowed down to 3 things overfishing , pollution and a lot of sedimentation, sad to see, it takes years and years for coral to grow, one event like pollution ,someone stepped on coral and fishes aren't there and it takes a really long time for the coral to recover and it's gone and it takes a really long time.

Terah Summers - Baldwin High School sophomore – Results on our Science Project from 4 beaches are quite interesting, Honolulu Bay is

MLCD, Ahihi Kina'u Natural Area Reserve, Kahekili Beach park and Papalua point has no restrictions, found that we did a scatter plot to see correlation between the coral reef and fish population and very obvious more fish results in a bigger mass of coral, just by looking at the area you can tell the difference we understand that there are factors it really is a part of the culture here and it's really important, we need to understand to practice sustainable fishing it's not one group or one person, we all need to work together. Because regulations are not in place then we won't have an ability to fish. Were glad to see everyone is here and that the community does care.

Daryl Aiwohi – Honokahau Valley family originally owns the land. We have a problem, we have been overrun, no one respects our tradition, our Ahupua'a, the Konohiki was the one who told you can and cannot fish we never overfished. The problem is run off the lack of freshwater why go after the Hawaiian people. DLNR doesn't do anything about it, Maui land & Pine never got fined, Why? Maui is just over populated, it will come at expense of native Hawaiians. We know that if there's dirty water in the ocean we know that there will be no fish.

Kupuna Kaina – aloha mai, I understand what is good from bad and right from wrong, I look at words "injure, kill possess and remove" who are you pointing the finger to? After your done with the constructing of the rule will you allow snorkeling?, will you allow boats to enter, and your not going to allow us to fish. Did you make a proposition before you came up with this? Did you go out to the community? the Kupuna about conservation, did you go to the right resources pertaining to the 'aina? the kai? We would have helped to culturalize the law. Ate every fish in the ocean, never waste our fish we know how many opihi to pick to feed our families, how much wana to pick up, how to clean the wana and how to discard of the garbage, my suggestion is to look for further community Kupuna resources and meet with them, make sure that there's no snorkeling and no boats coming in.

Holly Limkee - This is bad idea. We pay for someone else's mistakes, this has been going on for centuries all of a sudden due to new development, you start to putting stuff in the water? It's not right and your telling us we cannot go out and do what we have been doing because it's the only way I cannot teach my kids our ways to fish that's wrong.

Hoku Pali – I'm all for conservation but I'm also for preservation if you feel like this is the last resort then by all means do it, I want to see you check the

tourist and what kind of sunscreen they're wearing, make sure they don't let go in the water, make sure they are not doing things to kill the reefs first fish are not there, because the reef is dying. If your going to kill the coral reef you will not have any fish there, get rid of the problems we will start at this beach what are you going to be and what next beach, do something now and start there but what will you do?

John Kim - I'm for conservation, I hear everybody talking about pollution your targeting the wrong people the people who use the fish to eat, you have pictures of 3 types of fish, tumors of fish. You are targeting the wrong people.

Last signed testimony anyone want to come forward?

Mika Kepa- you gotta look at the whole world is becoming a city use that as model factor in what will happen to major city turning in to another major city. The water not going back in the ocean, problems at the delta and nutrients going back in the ocean. Irresponsible people, other Filipino's, Ponape people they don't know what is fish management , 2 more factors a bigger picture, were overpopulated, what's going to happen ? were on a rock you can only fit so many people on a rock and you going blame the Hawaiians.

Carrie Demont –teacher in Maui not lived here long , volunteer with Kahekili fish count program , I have taken students out and do fish counts, volunteer on Kahoolawe area, and also a volunteer Peace Corps, huge problems water taken away, land being destroyed , pollutions , and we have this one little area to try something to protect, to protect some fish certain ones, I do believe that people should be able to fish culturally, and fish to feed their families, the envasive algae is thick in this area and getting worse, we need to be sensitive to each other but we need to protect with this parrot fish and see them reproduce I would love to see this reef become healthy.

John Sebart - My middlename is Kuuleialoha I was born here this is my island too, I'm not lucky to live here all your life and grow up here, I do pick up gear on the beaches. This is about picking on Hawaiians , if we don't do something now we will not have fish for our kids.

Kekai K – We feel deliberately picked on, you cannot say that we cannot take fish from the ocean. Have the Governor sign in to law and tell all these

big resorts & big land owners no use of petroleum products on the land on the golf courses, is it this easy to do this to us Hawaiians. When we showed up for the EPA meeting last month we came together because of injection wells and all that water going into the ocean , enough is enough No law ,no police that will chase me out of the water. Tell Lingle to sign in to law no use of petroleum based products, pesticides and herbicides.

? - Pertaining to reserve area who has title to the area? Does DLNR have title for the area? Give the people their right. I am for conservation only when it involves the original jurisdiction and the original people of the land.

Keaumoku Kapu– Aloha mai specific comments if it comes to the Kupuna interesting the benefit of island addressing issues, comments from Kupuna in area, is this so called closure, temporary? How long will this be?The kama'aina suffers in this revolution many times ,the causes we know are from golf courses seepage in injection wells, and hydrogen levels, people of the area know where problem lies. This issue should have a moratorium, closures through out the year, lobster season, mullet, bag limits, crabbing. How many species that are carnivores will they curb the limu algae.

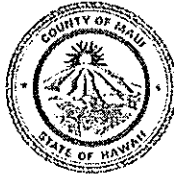
VII. Decision-making on the proposals:

- A. Based on the testimony presented, the Department will submit its findings and recommendations to the Board of Land and Natural Resources.
- B. If approved by the Board, the Department of the Attorney General will conduct a final legal review. If approved, the proposed rules will be given to the Governor for her final approval.
- C. Should the Governor grant approval, certified copies will be filed with the Lt. Governor's office, and after 10 days, it becomes effective as law.
- D. Are there any questions regarding this process?

VIII. Adjournment

- A. On behalf of the Board of Land and Natural Resources and the Department of Land and Natural Resources, thank you for attending this public hearing. This public hearing is now adjourned. **Time: 7:49 P.M.**
- B. Thank you for taking time out from your evening to attend this hearing. Good night!

CHARMAINE TAVARES
MAYOR



OFFICE OF THE MAYOR
County of Maui

200 South High Street
Wailuku, Hawaii 96793-2155
Telephone (808) 270-7855
Fax (808) 270-7870
e-mail: mayors.office@mauicounty.gov

February 4, 2009

Department of Land & Natural Resources
Division of Aquatic Resources
130 Mahalani Street
Wailuku, Hawaii 96793

RE: KAHEKILI HERBIVORE FISHERIES MANAGEMENT AREA, MAUI

Aloha and thank you for this opportunity to provide testimony on the proposed designation of the Kahekili Herbivore Fisheries Management Area. I fully support this measure to protect populations of marine fish and urchins that are critical to maintaining positive coral reef health. There are many factors that affect the quality of our nearshore waters and the ability of our unique marine life to thrive. As such, there are also many steps we can take to further improve the future outlook of this important ecosystem that supports the quality of life we currently enjoy. The establishment of this herbivore fisheries management area is one of those key steps.

My administration has been a strong proponent of protecting Maui nui's reefs and nearshore waters. Last year honored the International Year of the Reef and we are proud to have led the State of Hawaii into action to raise awareness about our marine resources and their need for greater care. We will continue our efforts, including supporting measures like these.

I would like to request that the department's Division of Aquatic Resources keep my office and the public informed on the progress of this FMA and its affects on the coral reef. It is integral that information about the FMA's restricted species and other related rules be accessible to the public on a regular basis. As always, the ability to enforce the rules is key to ensuring compliance in some individuals within our community, which requires cooperation with DLNR's DOCARE staff.

I support this designation and offer the Division of Aquatic Resources my assistance where needed. On behalf of our community, mahalo for your efforts.

Sincerely,

A handwritten signature in black ink, appearing to read "Charmaine Tavares", is written over a horizontal line.

Charmaine Tavares
Mayor, County of Maui

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testimony
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Testimony of Robin Knox
02/04/09
Kahekili Herbivore Management Area

My name is Robin Knox. I am an environmental scientist and water quality specialist. I support the proposed Kahekili Herbivore Management Area and the rule to prohibit the take of certain herbivores (surgefishes, parrotfishes, rudderfishes, and sea urchins). Maui's reefs are in decline due to algal blooms. Overfishing of herbivores and discharge of nutrients from land-based pollution have been identified as causes contributing to algal blooms.

I would like to thank the Department of Land and Natural Resources, Division of Aquatic Resources for their forthright proclamation of the crisis afflicting our reefs. According to "Status and Trends of Maui Reefs" (DLNR-DAR, Hawaii Coral Reef Initiative 2008), reefs affected by degradation due to algal overgrowth not only have lower coral cover, but also have lower commercial and recreational value, and will support limited fish stocks to the detriment of all resources users. I would like to thank the informed and responsible resource users, the fishermen and other community members who understand that this statement is true, and who support these management efforts.

DAR also said that "Recovery of herbivore stocks may be part of the solution at some locations, but without other steps to reduce land-based impacts there is unlikely to be substantial recovery across the island's reefs". I want to commend the DAR for the recognition of the land-based contributions and the actions taken to date to begin to identify sources and solutions of this problem. In particular I want to recognize the testimony submitted to the Environmental Protection Agency regarding the impacts to reefs and fisheries from the Lahaina sewage injection well. The DAR has also been involved with Department of Health in looking for better ways to use biological data to determine where water quality is impacted and pollution control is needed.

The fact that DAR has engaged in a comprehensive approach to resource management, and is not merely leaning on the fishermen to control the overfishing part of the problem gives me hope for the reef. Climate change will stress the reef in ways that we cannot directly control. Pollution and overfishing are two stressors we can control. DAR is providing much needed leadership in addressing those aspects of the problem that we can control.

According to Robert Richmond ¹(Pacific Biosciences Research Center, University of Hawaii), Coral reefs and other coastal marine ecosystems effectively extend into adjacent watersheds, and should be managed as an integrated unit. I request that DLNR not only move ahead with the proposed rule to prohibit take of algae-eating fish, but also support and promote watershed management activities to reduce land-based pollution reaching the waters of Kahekili Herbivore Management Area.

¹ Richmond, et al 2007. Watersheds and Coral Reefs: Conservation Science, Policy and Implementation. BioScience Vol.57 No.7, July/August 2007.

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Darla J
White/DLNR/StateHiU
S

02/19/09 04:23 PM

To Rhodie F Masusako/DLNR/StateHiUS@StateHiUS
cc Russell T Sparks/DLNR/StateHiUS@StateHiUS
bcc
Subject Fw: testimony in support of Hawaii Administrative
Rule (HAR) Chapter 13-60.7, Kahekili Herbivore
Fisheries Management Area, Maui

Here is another testimony...THANKS!!! Darla

----- Forwarded by Darla J White/DLNR/StateHiUS on 02/19/2009 04:21 PM -----

Liz Foote
<lfoote@hawaii.rr.com
>

02/19/2009 03:35 PM

To Russell Sparks <Russell.T.Sparks@hawaii.gov>
cc Darla White <Darla.J.White@hawaii.gov>
Subject testimony in support of Hawaii Administrative Rule
(HAR) Chapter 13-60.7, Kahekili Herbivore Fisheries
Management Area, Maui

Hi,

Here is my testimony; it's essentially what I said at the hearing...

Name: Liz Foote
Wailuku, Hawaii
(808) 669-9062

I am providing this testimony as an individual, though I do work as the Hawaii Field Manager for the Coral Reef Alliance, and I'm the Executive Director of Project S.E.A.-Link.

I fully support the proposed rule to establish the Kahekili Herbivore Fisheries Management Area (Hawaii Administrative Rule (HAR) Chapter 13-60.7, Kahekili Herbivore Fisheries Management Area, Maui)

The importance of reefs in terms of Hawaii's ecology, economy and culture is well established and understood, as is the significance of the many threats to reefs worldwide and on a local scale. In particular, the Division of Aquatic Resources' data show that the North Kaanapali reef system has seen a 50% decrease in coral cover over the past decade. The science behind the conception that healthy herbivore populations can keep algal growth in check is also well-established within the international coral reef research community.

The proposed rule change would establish a specifically-defined area where populations of herbivorous fishes and invertebrates are protected, and it would also ban fish feeding in the area. This is an exciting opportunity for science and resource management, since its outcomes can be monitored and its effectiveness as a management action can be assessed.

Finally, I would like to convey that through my own work in education and outreach, I have the impression that many people in the community do support this initiative, even if they did not attend the February 4th hearing or submit written testimony, and I will do my best to help inform people about what this proposed rule change does and does not entail, in order to increase support for it and the buy-in and voluntary compliance that is needed for the management action to work.

Donna L L I Brown
<donnabro@hawaii.edu

To Russell.T.Sparks@hawaii.gov

cc

bcc

Subject Kahekili

>
02/19/09 02:59 PM

To:

Russell Sparks
Division of Aquatic Resources
130 Mahalani Street
Wailuku, HI 96793

I am writing to support the proposed new rule HAR Chapter 13-60.7 to prohibit taking of herbivores from the nearshore waters from Keka`a point to Honokowai.

I have been doing research diving with UH projects since 1992. In this time I have done at least 500 dives at Kahekili Beach park. (many before it was a park) Over the years I have seen the reefs around Maui dying before my eyes. At Kahekili, the live coral reef used to start right off the beach. Now most of the coral is dead, choked off by invasive algae. I have also seen the fish abundance drop over the years.

I have been volunteering with the herbivore surveys to look at how much algae the fish are eating. It only make sense that if there are more herbivores on the reef there should be less algae. I am glad that fish feeding will be prohibited also. I think this area is a perfect place to set aside as a Fishery Management Area since it is mostly resorts.

I hope you will pass this rule for the future health of our reefs.

Mahalo,
Donna Brown
Coordinator, Marine Option Program, Maui Community College
310 Kaahumanu Ave.
Kahului, HI 96732



donnabro.vcf

To Whom It May Concern,

I wasn't able to attend the public hearing in support of Kahekili, but I would like to make my voice heard on the issues that were discussed. As a west Maui resident, I feel it's important to take whatever steps we can to protect our coral reefs. As we all know, there is a worldwide threat to the health of our reefs. Having the ocean for a playground is a blessing and privilege and we shouldn't take it for granted. In the interest of protecting the reef and other marine life for future generations, I think we should establish the nearshore waters of Kahekili as an herbivore fisheries management area and prevent people from taking herbivorous fish and urchins that keep the reef healthy.

Mahalo for your consideration of this matter.

Sincerely,

Alison Webb

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Div. of Aquatic Resources



UNIVERSITY
of HAWAII
MĀNOA

Department of Zoology

FO

February 10, 2009

Dan Polhemus, PhD
Administrator
Hawaii Division of Aquatic Resources
Department of Land and Natural Resources
1151 Punchbowl Street, Room 330
Honolulu, HI 96813

AQUATIC
RESOURCES: 2102

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COMM. FISH.	
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AQ REC	
PLANNER	
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Dear Dr. Polhemus:

I write in support of the Kahekili Herbivore Fisheries Management Area (HFMA) on Maui and commend the Division of Aquatic Resources for taking this innovative step to help ensure the health of Hawaii's coral reefs.

Herbivores are critical to the balance of the coral reef ecosystems in Hawaii but have been dramatically overfished, particularly around more populated areas of Oahu and Maui. Uhu in particular have been removed or displaced to deeper water, thus limiting their proper ecological role in shallow water. When fishing pressure forces uhu to deeper water, they can no longer perform such vital ecological services as removing algae and creating sand.

Results from a comprehensive assessment of fish and habitat inside and outside MLCDs around the state have shown that macroalgae abundance is significantly higher adjacent to MLCDs relative to inside their boundaries where herbivore biomass is higher (Friedlander et al. 2007).

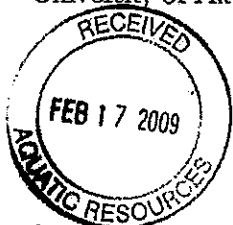
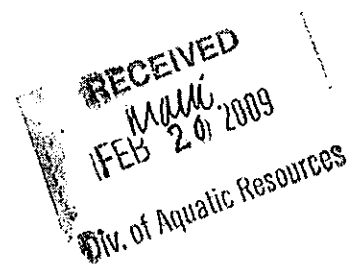
Examinations of areas around the state that are open to fishing show a strongly significant negative relationship between herbivore biomass and macroalgae. That is, locations that had higher herbivore biomass had lower macroalgal cover and visa versa. This was even more pronounced when only larger (>15 cm) herbivores were included. This emphasizes the importance of herbivores, but especially large ones.

Protecting herbivorous fish populations in an area off Kahekili should result in an increase in fish populations, an increase in fish size, a decrease in algae growth, and a healthier reef ecosystem overall.

Sincerely,

Alan Friedlander

Alan Friedlander, Ph.D.
Hawaii Cooperative Fishery Research Unit
Department of Zoology
University of Hawaii



February 4, 2009

RE: Kahekili Herbivore Fisheries Management Area, Chapter 13-60.7, Hawaii Administrative Rules

My name is Rick Long, and I am social worker with the Hawaii Department of Health in Wailuku.

I do not represent anyone but myself.

I want the people of Hawaii to keep the islands and their families healthy for generations to come.

An important part of being a healthy people, is to keep the land and the sea healthy.

For over one year, I have been a volunteer herbivore surveyor on Maui's reefs from Honolua Bay to the Ahihi-Kina'u Natural Area Reserve.

This proposed regulation is not about fishing.

It is about keeping the coral reef healthy.

If you stand on the shore, you may fail to see the coral reef just below the water.

But, ancient Hawaiians knew the coral reef so well at they placed it at the beginning of life on land and sea in the **Kumulipo**, the chant of origins.

"Born was the coral polyp, born was the coral, come forth" as Martha Beckwith translated this line into English.

The coral reef is the foundation of life in the ocean.

Some coral colonies are hundreds of years of old, and some may be thousands of years old.

This regulation is not about fishing.

It is about an invader that is killing the coral, a spiny seaweed with the scientific name **A. Spicifera**.

It arrived in the islands over 50 years ago, and has spread from island to island.

Why not just start pulling it out by hand, or why not bring back the "super sucker" from Oahu to remove it?

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FEB 04 2009
Div. of Aquatic Resources

testimony

It invades our reefs by breaking apart and floating to new locations. It seems that pulling it out just causes it to spread.

Last summer at a different location, I watched the normal surge of the ocean break off branches of *A. Spicifera* that floated away and then used the hooks in its branches to anchor on healthy coral.

In just a couple of months, it had moved hundreds of feet to the south on the Olowalu reef.

The reef at Kahekili is different, because there is an opportunity to let nature solve the problem.

Let the fish eat the algae to keep it under control.

Let me repeat: Let the fish eat the algae to keep it under control.

The wisdom and the science in this proposed regulation begins to sound similar to the ancient wisdom and science in the *ahupua`a* system of management.

Now, listen to the wisdom of the scientists who want to declare a period of *kapu* on the take of some fish, just as there were *kapus* in ancient times.

If they are wrong about the *kapu*, we will have been inconvenienced.

If they are right about the *kapu*, the coral reef will have a chance to survive.

At the beginning, I said I want the people of Hawaii to keep their families and the islands healthy for generations to come.

If the coral reefs of Maui continue to die, the fish will continue to disappear.

Without the coral reefs and the fish, the spirit and cultures of the people of Hawaii will be harmed.

I love Maui as a people and as a living island of birds and trees and fish in the sea.

If we don't act to save all of this, it will no longer be Maui.

It will just be the rocky island airport OGG in the middle of the Pacific Ocean.

Rick Long

120 Manino Circle, #202

Kihei, HI 96753



2465 Olinda Road, Makawao, HI 96768
www.lifenetnature.org

February 4, 2009

Laura H. Thielen, Chairperson
Hawaii Department of Land and Natural Resources (DLNR)
Kalanimokii Building, 1151 Punchbowl Street
Honolulu, HI 96813

Support for the proposed Herbivore Fisheries Management Area at Kahekili, and a call for strong, comprehensive measures to protect marine fishes and coral reefs of Maui Island

Dear Ms. Thielen:

As a conservation organization fairly new to Hawaii, we offer the following:

Observations:

1. Many marine fishes are severely depleted along Hawaii's more accessible and populated areas; excessive fishing is the principal cause (see, for example, Williams et al. 2008).
2. Herbivorous fishes, such as parrotfishes, surgeonfishes, and chubs, control invasive seaweeds which damage coral reefs (DAR 2008).
3. Maui's coral reef ecosystems are threatened by invasive algae as well as by land-based pollution (DAR 2008). Some are in a state of collapse.
4. Marine reserves serve to protect vulnerable coastal ecosystems, including coral reefs, and can improve fish stocks beyond their boundaries (NCEAS 2001). On Maui, the Honolua-Mokuleia Marine Life Conservation District harbors more than three times the fish biomass than comparable fished areas outside the reserve (Friedlander 2008). My wife and I often snorkel Maui's coral reefs from Kihei to the Ahihi Kinau Natural Areas Reserve. It is remarkable to see the high diversity, abundance, and size of fishes within the reserve, and, in sharp contrast, so few parrotfish, chubs, and certain surgeonfish outside of the reserve.

Comments:

1. Maui's fish stocks need strong protection from overexploitation if the Island is to achieve a sustainable fishery, protect its coral reefs, and safeguard the marine food web. Overfishing is a worldwide epidemic (The Economist 2008) that will require exceptional leadership to end at local and state, as well as national and international levels.
2. We applaud DLNR's efforts to consider enhanced regulations and management for certain marine fishes (your news release of January 12, 2009), and we are encouraged by the strong local support voiced by many fishermen and other community members at DLNR's public hearing in Kahului on January 14. However, it is highly unlikely that its current focus on "minimum size rules" will suffice to curtail overexploitation of Maui's fish stocks.
3. A robust marine reserve system is needed for Maui to help ensure the sustainability and ecological functionality of fish populations and those of other marine organisms. The Island currently has only two areas serving as refuges for fishes and other marine life, amounting to a mere 5 miles or so (4%) of the island's 120 miles of shoreline (by our estimate). Marine reserves, if adequate in number, distribution, and size, can yield tremendous ecological, economic, and cultural benefits (Roberts and Hawkins 2000).
4. We commend DLNR for its proposal to create an Herbivore Fisheries Management Area (HFMA) at Kahekili on West Maui. At the same time, we encourage broadening the scope of the current proposal, as it would add less than 2 miles of additional protected coastline. As an immediate measure, we suggest HFMA status also for the Kamaole area of south Maui since it is at similar risk from invasive seaweed as Kahekili (DAR 2008).
5. Maui's coral reef ecosystems are also threatened by runoff sedimentation, nutrient pollution, global warming, and other factors related to development and human population growth. Maui Island needs an effective wastewater treatment system, better control of non-point source pollution, a process for integrating conservation and development plans, a greenhouse gas emissions control program, and a monitoring program to evaluate the effectiveness of pollution abatement measures. Maui County seeks to address these matters in developing its long-range Maui Island Plan. We urge DLNR to vigorously support and collaborate with Maui County to meet these needs.

Thank you for considering our comments on this vital subject. We hope they will receive a favorable review. Mahalo!

Sincerely,

Tony Povilitis

Tony Povilitis, Ph.D.

cc:

✓ Division of Aquatics Resources (1151 Punchbowl St., Room 330, Honolulu 96813)
Planning Office, County of Maui (via email)
Maui County Council (via email)

References:

Friedlander, A. 2008. Fish habitat utilization patterns and evaluation of marine protected areas in Hawaii. Presentation available on line at:
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"Aloha Shell Service"
<alohashellservice@hawaii.rr.com>

02/06/09 08:38 AM

To "Russell Sparks" <Russell.T.Sparks@hawaii.gov>
cc "Darrell Tanaka" <sunshineorchids@gmail.com>,
"Wayne Kobayashi" <printersinc800@hotmail.com>,
"Trent" <tmkyono@ucla.edu>, "Tonia Drazkowski"
bcc

Subject Kahekili no take herbivore zone

Aloha Russell,

Thank you for allowing to give testimony.

Creating a no take herbivore in Honokowai as an attempt to control invasive limu is a good idea.

Protecting herbivores will initially increase their numbers and hopefully bring the seaweed density down. However, there will be a time when the fish population will decrease from a high as nature balances itself. Natural predators and environmental pressures will eventually determine the herbivore and limu population.

Removing the human factor should include all aspects of how we affect or impact the entire ecosystem and not just create a no take area.

Our goal or focus should be to remove all of these aspects and not just penalize those who have traditionally taken herbivores responsibly.

Mahalo,

Paul Hanada
877-5894

Mr. Russell Sparks
Division of Aquatic Resources, DLNR
130 Mahalani St
Wailuku, HI 96793

Feb 5, 2009

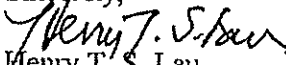
Dear Mr. Sparks:

Although I was unable to attend the meeting held last night in Lahaina (I live in Kula) I would like to express my general support for a temporary ban, on specific kinds of fish, for a limited time, if that is what we have to do to save our reefs. If the proposed ban works for west Maui as proposed, we then should apply similar measure elsewhere, like Maalaea Bay and other area where our reefs need help.

Along with such bans however, we should continue monitoring our reefs to assess recovery results. State and county authorities must be vigilant, and firm, in publicizing the kapus and in policing the affected areas. A ban without enforcement and monitoring would be futile.

It is very gratifying to read about, and to see government taking positive action to save one of our most precious, but depleting resource.

Sincerely,


Henry T. S. Lau
440 Polipoli Road
Kula, HI 96790

RECEIVED
Maui
FEB 10 2009
Div. of Aquatic Resources

Mrs. U. Xapu
PO Box 11524
Lahaina, Hawaii 96761

Division of Aquatic Resource
1320 Mahalanoff Street
Wailuku, Hawaii 96793

February 8, 2009

Aloha,

I was in attendance at your public meeting on February 4, 2009 6pm @ Lahaina Civic Center. I gave testimony regarding your closer of Keka'a to Honokowai. Regarding gathering surgeonfishes, parrotfishes, rudderfishes and sea urchins so that it could better coral reef health.

I disagree with this closer and would just like to put this on record. As a native Hawaiian that is of this ahupua'a. We have rights to gather within our ahupua'a at any time for any reason to sustain and better our health and living conditions in anyway we see fit.

It is a law that we as native Hawaiians have rights and that it is recognized by the legislation and all state and county officials.

Our ohana's of this ahupua'a know how to gather so that the cycle of life continue for the next generation. We also have always been confronted by DNR officers that have harassed ohana's while doing there traditional practices in order to sustain there ohane not for profit.

Mahalo,
Mrs. Xapu

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FEB. 13 2009

Div. of Aquatic Resources



UNIVERSITY
of HAWAII®
MĀNOA

email → 2/15/09
RS.

15 February, 2009

Dan Polhemus, Ph. D.
Administrator
Hawaii Division of Aquatic Resources
Department of Land and Natural Resources
1151 Punchbowl Street, Room 330
Honolulu, HI 96813

Dear Dr. Polhemus:

I am writing in strong support of the proposed Kahekili Herbivore Fisheries Management Area (HFMA) on Maui.

Thriving herbivore populations (fish and sea urchins) are well known to be primary agents of top-down control of invasive and/or alien algae on Hawaii's reefs and elsewhere. Where these populations are diminished by over-fishing, reefs shift from coral dominance to algal dominance, and such shifts have long-term negative consequences for reef health.

The Division of Aquatic Resources is to be commended for proposing and implementing innovative and effective management tools such as HFMA's. The reef at Kahekili should set an excellent example for how Hawaii's reefs can be protected for the benefit of future generations.

Best regards,

Cynthia L. Hunter

Cynthia L. Hunter, Ph. D.
Associate Professor
Marine Biology

February 4, 2009

Dan Polhemus, PhD
Administrator
Hawai'i Division of Aquatic Resources
Department of Land and Natural Resources
1151 Punchbowl Street, Room 330
Honolulu, HI 96813

RECEIVED
Hawaii
FEB 17 2009

Div. of Aquatic Resources

AQUATIC RESOURCES: 2087	
DIRECTOR	<input checked="" type="checkbox"/>
COMM. FISH.	<input type="checkbox"/>
AQ RES/ENV	<input checked="" type="checkbox"/>
AQ REC	<input type="checkbox"/>
PLANNER	<input type="checkbox"/>
STAFF SVCS	<input type="checkbox"/>
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Dear Dr. Polhemus:

The Nature Conservancy of Hawai'i supports the establishment of the Kahekili Herbivore Fisheries Management Area (HFMA) on Maui. We commend the Division of Aquatic Resources for its attention to depleted populations of herbivorous fishes and to the increasing spread of invasive algae that is smothering Hawaii's reefs.

Invasive algae threatens our reefs

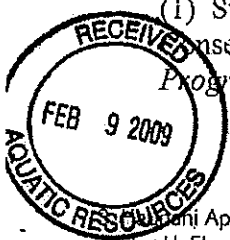
The reef offshore of Maui's Kahekili Beach Park in the north Kā'anapali area is under stress, with monitoring data showing a steady decline in living coral cover and increasing problems with invasive algae. In 1994, approximately 55 percent of the bottom was covered with living corals, but by 2007 that had declined to only 33 percent. In several recent years, the reef has been overgrown by summer blooms of invasive seaweed, particularly the red algae *Acanthophora spicifera*.

Because excessive seaweed abundance adversely affects corals' ability to grow and reproduce, a serious concern is that unchecked seaweed growth will lead to a downward spiral of degradation, in which the reef changes from being an actively growing and structurally complex habitat, into an eroding and relatively flat area unable to support abundant marine life. Once severe degradation has occurred, any future recovery is likely to be very slow. It is essential to act now, while the Kahekili reef still has considerable natural capacity to recover.

Herbivore protection will improve reef health

More and more science points to the vital role herbivores play in maintaining reef health and to their likely positive impact on reducing the level of invasive algae, including the following:

- (1) Studies in Hawai'i and elsewhere, including a 2007 report on Hawaiian Marine Life Conservation Districts (MLCD) and comparable fished areas published in *Marine Ecology Progress Series*, have shown that: (i) reefs with abundant herbivorous fish tend to have little or



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no problem with algal blooms, whereas reefs with few grazing fishes often have abundant seaweeds; and (ii) reefs closed to fishing tend to have much larger stocks of herbivorous fishes than comparable areas open to fishing (see ↓).

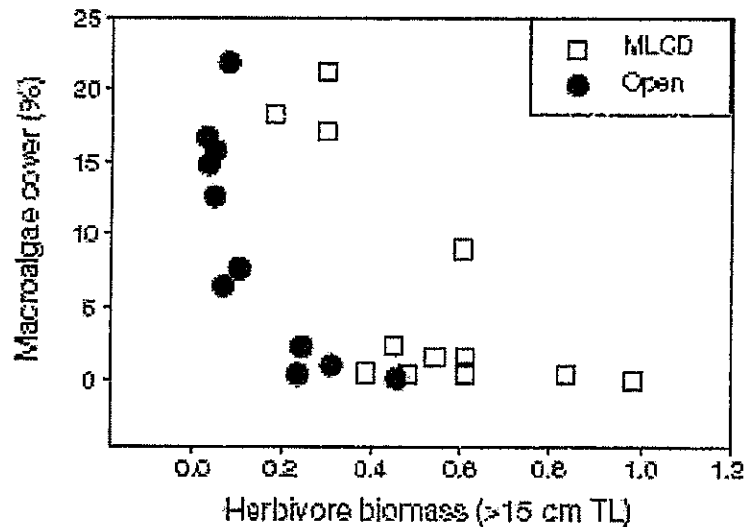


Figure 1. Relationship between seaweed cover and biomass of herbivorous fishes. Taken from Friedlander et al, 2007, Marine Ecology Progress Series 351:221-233. Two clear findings: (i) Hawaiian MLCDs have higher biomass of herbivorous fishes than fished areas; (ii) strong negative relationship between herbivorous fish abundance and seaweed cover.

(2) There is a sound basis for believing that herbivorous fish populations at Kahekili will substantially increase if the proposed HFMA is established. First, surveys by DLNR-DAR have shown that Kahekili herbivore populations are approximately 40 percent of those at Honolulu Bay MLCD, the nearest reef area closed to fishing. Second, although reef degradation has begun, that process is not yet far advanced at Kahekili, so the reef there is still capable of supporting healthy populations of herbivorous and other fishes.

(3) The most conspicuous problem seaweed at Kahekili, *Acanthophora spicifera*, has been found to be among the most preferred foods for grazing fishes in studies both in Hawai'i and elsewhere in the world where that species is found (see ↓).

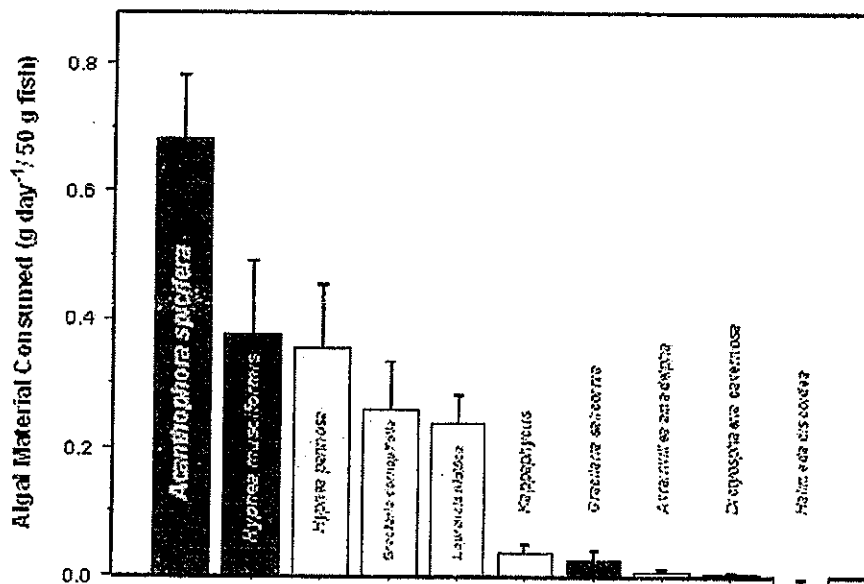



Figure 2. Feeding preference of Hawaiian grazing fishes for invasive algae. Red columns represent the most widespread invasive alien algae in Hawai'i. Herbivorous fishes used in trials were various surgeonfish and parrotfish (*Acanthurus blochii*, *A. triostegus*, *Zebrasoma flavescens*, *Z. veliferum*, *Chlorurus sordidus*, and *Scarus psittacus*). Data from Hunter et al. Ecological Success Alien and Invasive Algae [http://www.hawaii.edu/ssri/hcri/rp/hunter/final_report_99-00/01.htm].

Summary

There is every reason to expect that protection of herbivores and other proposed management actions at Kahekili will lead to increased herbivore stocks and ultimately to a healthier reef that is better able to sustain and support other uses, including recreation, tourism, and fishing of non-herbivorous fishes.

More widely, the spread of alien and other invasive algae is a significant and worsening problem in Hawai'i. Where they are appropriate, such as at the proposed Kahekili HFMA, herbivore fisheries management areas can be an effective tool to prevent or reverse coral reef decline, and thereby protect the quality of the nearshore marine environment, which is fundamental to Hawaii's way of life and economy.

Sincerely,


Suzanne Case
Executive Director

Aloha

This is my testimony

Regarding Adoption of Chapter 13-60.7
for a bill in favor of a enhancement area
for herbivore fish.

I believe that Kahakili is in need of protection
from overfishing and this bill might do a small part
in helping the fish replenish.

I support a H&A at Kahakili park area.

Mahalo

Wayne Cochran

WAYNE COCHRAN

553 Office Rd

Lahaina HI 96761

email: monelovianovi@gmail.com

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FEB 17 2009

Maui

Div. of Aquatic Resources

February 10, 2009

Received email
2/17/2009 ALS

Maui
Division of Aquatic Resources
130 Mahalani St.
Wailuku, HI 96793

Re: Kahekili Herbivore Fisheries Management Area

To whom it may concern:

Please accept this letter as support of the legislation for the Kahekili Herbivore Fisheries Management Area. This area desperately needs intervention.

My concerns are for the sustainability of our environment. While it appears this legislation will attempt to ameliorate the destruction, I am concerned that it is not enough to reverse the damage.

As a Kaanapali resident and taxpayer over the past 10 years, I was shocked during my most recent snorkeling in the area last week when I experienced the devastation of the marine environment. The visibility was significantly reduced, which was frustrating and exacerbated when I realized all that was to be seen was brown and about 15 fish. I remember a time when there was a complete color palate of coral and fish, swimming with schools of fish, and the water - clear as bath water.

Many people and marine life are dependent on this area for their livelihood, food source, and pleasure. Our swimming, snorkeling, and diving are some of the best in the world, which attract many tourists for that sole purpose. At a time when tourism is decreasing we can not loose this attraction as well.

Mahalo,

Kathryn

Kathryn L. Dragas

Received email
2/18/2009 R.E.



February 18, 2009

Division of Aquatic Resources
1151 Punchbowl Street, Rm. 330
Honolulu, Hawai'i 96813

Re: Proposed HAR, Chapter 13-60.7, Kahekili Herbivore Fisheries Management Area – In Support

Dear Mr. Polhemus,

Thank you for the opportunity to comment on the proposed rule creating the Kahekili Herbivore FMA. The Maui Nui Marine Resource Council's (MNMRC) mission is "to bring human actions into balance with ecological principles... so that the health of our near shore waters will be restored ... and sustained for future generations." In addition, our goals include the following: to assist in the recovery of the near shore marine environment; and, to encourage the geographical regions of Maui Nui to responsibly manage their near shore activities.

At its monthly meeting on February 12, 2009, The MNMRC members and guests were given an opportunity to voice their concerns and they expressed unanimous support for the plan. The Council then voted unanimously to support the Kahekili Herbivore FMA proposed rule, as written.

Though support was unanimous, one topic arose concerning native Hawaiian traditional and customary rights associated with marine resources for subsistence, cultural and religious purposes. It appears those rights are not recognized in the rule and there was some concern expressed over that.

Council members are appreciative of division efforts to further protect Maui Nui's marine resources and look forward to future collaborative efforts to effectively manage our nearshore fisheries which are in urgent need of protections.

Sincerely,
Rene Umberger
Administrator

February 16, 2009

State of Hawaii
Division of Aquatic Resources
130 Mahalanani St.
Wailuku, HI 96793

Re: Hawaii Administrative Rule (HAR) Chapter 13-60.7, Kahekili Herbivorous Fisheries Management Area, Maui.

Thank you for the opportunity to comment on the proposed change in the fisheries regulations for Kahekili on Maui. I fully support the Kahekili Herbivore Fisheries Management Area (HFMA). This is a novel approach to manage fisheries resources in Hawaii and is an excellent step to restoring our depleted nearshore fish communities. Ideally, it would be preferable to create a complete no take zone along this section of coastline but some regulations are better than none.

It has been shown not only in Hawaii but elsewhere in the tropics that herbivores (surgeonfish [manini, palani, kala, etc.], parrotfish [uhu], rudderfish [nenu], and sea urchins), are critical to maintaining coral reef ecosystems. They are responsible for essential ecosystem services such as grazing algae and keeping the algae from overgrowing reefs. As nearshore areas become over developed and excess nutrients make their way to the ocean it is imperative that fish communities remain healthy to counter the imbalance in the ocean. For example, the West Maui Sewage Treatment Facility near Kahekili has long been suspected of dumping nutrient rich wastewater that reaches the ocean through injection wells. Algal blooms of the filamentous green algae (*Cladophora sericea*) that occurred in the late 1980s and early 1990s were thought to be triggered by these excess nutrients (Smith et al., 2005). Recent scientific evidence from just north of Kahekili Beach Park has identified a possible outflow source. Protecting herbivorous fish communities in this area coupled with alternative sewage treatment options would be an excellent strategy for keeping the algal blooms from reoccurring at this popular tourist beach.

I have studied the nearshore environment at Kahekili since 1993 as part of my doctoral dissertation and focused on both the coral communities and fish populations. The reef tract along this stretch of coastline had some of the highest coral cover (52% coverage at 10ft and 58% at 20ft) on Maui when I first began my research. Since 1994, coral coverage has declined dramatically to 38% at the 10ft site and 31% at the 20ft site. During this time there has been a corresponding increase in macroalgae from less than 2% to higher than 16% with numerous algal outbreaks reported in the interim. The fish populations during this same time period were never as abundant or large as in Honolua Bay Marine Life Conservation District which is the closest marine protected area (MPA) to Kahekili.

Recently, Alan Friedlander and I conducted and published a statewide evaluation of the efficacy of MPAs in Hawaii (Friedlander et al., 2007a, Friedlander et al., 2007b). We found that areas open to fishing had a strong, negative relationship between herbivore biomass and macroalgae. Thus, locations with higher herbivore biomass such as MPAs had lower macroalgal cover. In addition, we observed that the MPAs had significantly larger fish which were able graze the algae more effectively. These results illustrated the importance of herbivores and especially large ones in keeping macroalgae in check. Other Pacific Island countries (e.g. Australia, Philippines) have also shown the importance of herbivores in maintaining healthy coral reef ecosystems after successfully implementing MPAs.

Therefore, I strongly believe that the state, in partnership with local communities, needs to establish more and larger MPAs in Hawaii to counter the problem of overfishing. Protecting herbivorous fish populations off Kahekili should result in an increase in fish populations, an increase in fish size, a decrease in algae growth, and a healthier reef ecosystem overall.

Thank you for the opportunity to express my concerns about the future of this beautiful place.

RECEIVED
Maui
FEB 18 2009

Div. of Aquatic Resources

Sincerely,

Eric K Brown

Eric K. Brown, Ph.D.
P.O. Box 117
Kalaupapa, HI 96742

References

- Friedlander, A.M., Brown, E.K., Monaco, M.E., 2007a. Coupling ecology and GIS to evaluate efficacy of marine protected areas in Hawaii. *Ecological Applications* 17, 715-730.
- Friedlander, A.M., Brown, E., Monaco, M.E., 2007b. Defining reef fish habitat utilization patterns in Hawaii: comparisons between marine protected areas and areas open to fishing. *Marine Ecology Progress Series* 351, 221-233.
- Smith, J.E., Runcie, J.W., Smith, C.M., 2005. Characterization of a large-scale ephemeral bloom of the green alga *Cladophora sericea* on the coral reefs of West Maui, Hawai'i. *Marine Ecology Progress Series* 302, 77-91.

Email 2/18/09
A.S.



PACIFIC WHALE FOUNDATION

To: Department of Land and Natural Resources
From: Brooke Porter, Conservation Director, Pacific Whale Foundation
Re: DLNR Draft 13-60.7 "Kahekili Herbivore Fisheries Management"
Date: February 17, 2009

Traditionally no-take management areas focused on a target species rather than the potential to regulate ecosystem functions (Hughes et al., 2006). Pacific Whale Foundation is in full support of the draft rule "Kahekili Herbivore Fisheries Management" (13-60.7) issued by the Department of Land and Natural Resources (DLNR). With the rapid decline of coral cover seen off many areas of Maui's near shore environment, Pacific Whale Foundation feels that serious actions are immediately necessary. Whereas management strategies often target a specific species, Mumby (2006) claims that ecosystem-based approaches, similar to the proposed Kahekili Herbivore Fisheries Management, are more effective and resulting in rugosity and overall health of the coral reef.

In the case of the Kahekili area, the coral reef cover is declining at an alarming rate. The population of grazers is one of the simplest coral reef management strategies through means of restrictions (Mumby, 2006). The management strategy presented for the Kahekili area serves to strictly manage the over harvesting of the herbivorous fishes vital to the coral reef ecosystem and thus promote coral accretion of the area. While many anthropogenic factors contribute to the demise of our coral reefs, over fishing is an unarguable source of degradation to the reef ecosystem (Jackson et al., 2001; Mumby, 2006; Hughes et al., 2006) and an effect that can be managed with minimal disturbance.

We appreciate DLNR's concern and proactive approach for the Kahekili area and are again in full support of the Kahekili Herbivore Fisheries Management proposed rule.

REFERENCES:

- Jackson, J, Kirby, M., Berger, W., Bjorndal, K., Botsford, L., Bourque, B., Bradbury, R., Cooke, R., Erlandson, J., Estes, J., Hughes, T., Kidwell, S., Lange, C., Lenihan, H., Pandolfi, J., Peterson, C., Steneck, R., Tegner, M., Warner, R. 2001. Historical Overfishing and the Recent Collapse of Coastal Ecosystems. *Science* 293(5530): 629-638.
- Mumby, P.J. 2006. The impact of exploiting grazers (Scaridae) on the dynamics of Caribbean coral reefs. *Ecological Applications* 16(2): 747-769.
- Hughes, T., Bellwood, D., Folke, C., McCook, L. & Pandolfi, J. 2006. No-take areas, herbivory and coral reef resilience. *Trends in Ecology and Evolution* 22(1): 1-3.

Dear DL.NR.

To whom It May Concern
My NAME is Beck STRAUSSNER I
MOVED to Maui IN 1990 I HAVE
been diving and Doing ENVIRONMENTAL
impact studies on coral reef systems
not only here but through out the
South pacific. As A result of my
Findings I have growing concerns.
When I heard about the KAHEKILI
HERBIVOR Fisheries Management project
I was very excited. I think
that proactive conservation IS A
STEP IN the right Direction. LET
ME know How I can Help, and
know you Have my Full Support.

THANK You!

Beck STRAUSSNER
(808) 205-4422
BSTRUSSNER@G-Mail.Com

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FEB 19 2009

Maui

Div. of Aquatic Resources

2/17/09

Aloha to the Department of Natural Land and Resources!

I am stoked that you have decided to stop the catching of parrot fish and surgeon fish in the small area of Kaanapali. I hope the seaweed-eating fish continue to grow in numbers and I really hope they help save the reef! It is a shame that the seaweed is killing off the reef. The fish need the reef and if people continue to eat the fish that help with reducing the amount of seaweed then it will never work! I hope the results come out in your favor for the sake of the reef and the fish! I support your idea all the way! If the plan works out and you decide to stop the catching of these same fish all over the island I will still continue to support you. I love to snorkel over beautiful reefs here in Hawaii and want nothing more but for them to continue growing so that the fish will as well. Thank-you for this experiment!

Aloha & Mahalo for listening!

Jenna James*

P.S. I am a student in the
Oceanography class currently at MCC.

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FEB 19 2009

Mau

Div. of Aquatic Resources

February 11, 2009

Dear Department of Land and Natural Resources,

I am writing in regards to Title 13, Chapter 60.3, "Kahekili Herbivore Fisheries Management Area, Maui," because soon you will decide whether or not to adopt this policy. I hope that you do decide what is important for the 'aina, and that you will vote for protection of the fish and urchins that eat the algae that is smothering our reefs. I am currently enrolled in an oceanography course, and I have been learning about how important reefs are in order to maintain balance in our ocean and our island. Without the reefs, there would be no fish, and without the fish, we would lose a significant, sustainable food source. In West Maui, our reefs are being threatened by algae, and the herbivores (surgeonfishes, parrotfishes, rudderfishes, and sea urchins) that are eating the algae are being taken. In order to reverse the intrusion, we must sacrifice for the greater good. It's not like the policy is to ban fishing altogether, it's just certain types of fish that we need to sustain our reefs, and that seems like a reasonable compromise to me. After all if people really care about Maui and want to keep our island beautiful, we must look after our resources and be conscientious and respectful occupants. I hope you decide to do the right thing. Aloha.

Sincerely,



Amy Erickson

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FEB 19 2009

Maui

Div. of Aquatic Resources

P.O. Box 547
Lahaina, HI 96767

February 11th, 2009

Ms. Darla White
Hawaii Division of Aquatic Resources
130 Mahalani Street
Wailuku, HI 96793

Dear Ms. White,

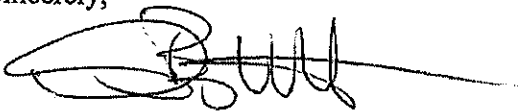
I am writing to you regarding the proposed Kahekili Herbivore Fisheries Management Area.

The invasive seaweed *Acanthophora spicifera* is endangering the reef ecosystem in the area proposed for protection. Like other alien algae, it competes for space on the reef, displacing native species and smothering live coral. Much of the once-healthy reefs off west and south Maui have become largely dominated by algae. Maintaining healthy populations of herbivorous fish on the coral reefs is critical to maintaining a reef's biological diversity.

I SCUBA dive in the proposed area and have personally seen the overall health of the reef decline in the last few years. I feel that the proposed rule will maintain the population of limu-eating fish and sea urchins to help control the overgrowth of algae on the coral reefs.

Since there are so many other areas accessible to fishermen and so many other types of fish to catch, I do not feel that banning fishing for these specific types of fish in this one area will create a hardship for anyone. I support the creation of the Kahekili Herbivore Fisheries Management Area.

Sincerely,

A handwritten signature in black ink, appearing to read 'Amy Bylett', with a long horizontal line extending to the right.

Amy Bylett

RECEIVED

FEB 19 2009

Maui
Div. of Aquatic Resources

Peggy Oki
<peggyo@peggy-oki.co
m>

02/19/09 09:25 AM

To Russell Sparks <Russell.T.Sparks@hawaii.gov>
cc
bcc
Subject Proposed Kahekili Herbivore Fisheries Management
Area, Maui

Dear Mr Sparks,

I am writing to express my full support of the draft rule "Kahekili Herbivore Fisheries Management" (13-60.7) issued by the Department of Land and Natural Resources (DLNR). Considering the rapid decline of coral cover seen off many areas of Maui's near shore environment, I feel that immediate serious actions are necessary. Ecosystem-based approaches, similar to the proposed Kahekili Herbivore Fisheries Management, are more effective and have proven in many cases worldwide to be highly successful.

Over fishing is a known source of degradation to the reef ecosystem. In the case of the Kahekili area, the population of grazers is one of the simplest coral reef management strategies through restrictions. The management strategy presented for the Kahekili area serves to strictly manage the over harvesting of the herbivorous fishes vital to the coral reef ecosystem and thus promote coral accretion of the area.

I appreciate DLNR's proactive approach for the Kahekili area and I am in full support of the Kahekili Herbivore Fisheries Management proposed rule.

Thank you for considering my comments.

Sincerely Yours,
Peggy Oki

5966 Via Real #3
Carpinteria, CA 93013

ph: 805.684.3573

Emailed 2/19/2009
BS.

Maui
Division of Aquatic Resources
130 Mahalaní Street
Wailuku, HI 96793

Re: HAR Chapter 13-60.7 - proposed rule for Kahekili Herbivore Fisheries Management Area

I am in support of the proposed Kahekili Herbivore Fisheries management Area. I have attended many lectures and read numerous publications on the state of our Maui reefs. I know that our reef's are in threat and unless we all start making some changes and address this urgent need to protect and preserve our shorelines, it will be too late.

Kahekili is a beautiful coral reef area, one of my favorites near Lahaina town and could use whatever help it can get. If studies are showing the algae growth is a big concern in that area, I believe we should be addressing all aspects that may be contributing to the bloom. Injection Wells have been identified as a contributing factor, but much work still needs to be done to solve that problem and Kahekili may not have that long to wait.

I think the best solution for Maui is to develop management plans and to include participation from the community. I think our community has felt divided with the DLNR's efforts to fix resource problems. Inevitably different stakeholders believe that they are not the biggest contributor to the problem and feel that they are being singled out.

I know that a lot of effort went into this plan and I was surprised to hear about anyone opposing it at the Lahaina public hearing. Fish feeding needs to stop and that is an easy rule for people to follow. Allowing fishers to continue to fish, but to leave specific crucial herbivores that will be important for mowing down the algae, sounds like a very thought out compromise.

What we all want, are more fish in the sea. We are all going to have to make changes and do whatever we can to help.

Mahalo nui loa,
Ananda Stone
West Maui Resident
1595 Kuuipo St.
Lahaina, HI. 96761
anandamrf@yahoo.com
cel: (808) 281-4591